

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of:

Nobutoshi DOI et al.

International Application No. PCT/JP2003/017014

I.A. Filing Date: December 26, 2003

U.S. Serial Number: 10/540,621 (unofficial)

Atty. Dkt. Number: NPR-171

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INFORMATION DISCLOSURE STATEMENT
UNDER 37 C.F.R. §1.97(b)

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November 8, 2005

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Documents UA to UF, FB to FD, DA to DT, DV, DZ to DCC and DHH

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are in the English language. Therefore, no concise explanation of the relevance of the documents under 37 C.F.R. §1.98 is believed to be required.

Document FA is not in the English language. However, the concise explanation of the relevance of the document under 37 C.F.R. §1.98 is believed to be satisfied by the submission of an English language abstract thereof.

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Please note that document DEE is described in the paragraph beginning on page 2, line 19, of the specification of the present application. Documents FA and DFF are described in the paragraph beginning on page 3, line 7.

Documents UA and FB are cited in the international search report of the present application. The relevance of each document is discussed in the International Search report (a copy of the

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search report was submitted on June 24, 2005). Please note an Examiner's obligation to consider documents cited in an International Search Report according to the provisions of MPEP §1893.03(g).

The Commissioner is authorized to charge our Deposit Account No. 111833 for any fee which is deemed by the Patent and Trademark Office to be required to effect consideration of this statement.

Respectfully submitted,

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Forty-four Documents

INFORMATION DISCLOSURE STATEMENT		Atty. Docket No. NPR-171	Serial No. 10/540,621 (unofficial)
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U.S. PATENT DOCUMENTS

Examiner's Initial		Document No.	Date	Name	Class	Sub Class	Filing Date If appropriate
	UA	2002/0161450 A1	10/31/02	Doi et al.	623	23.71	
	UB	4,870,966	10/03/89	Dellon et al.	128	334 R	
	UC	6,090,117	07/00	Shimizu	606	152	
	UD	6,156,575	12/00	Bellamkonda et al.	435	395	
	UE	6,214,021	04/01	Hadlock et al.	606	152	
	UF	5,735,863	04/07/98	Della Valle et al.	606	152	

FOREIGN PATENT DOCUMENTS

Examiner's Initial		Document No.	Date	Country	Translation Yes/No/Partial
	FA	5-237139 A	09/17/05	JP	Abstract
	FB	88/06871 A1	09/22/88	WO	
	FC	0 945 145 A1	09/29/99	EP	
	FD	02/47557 A1	06/20/02	WO	

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		Filing Date: August 18, 2005	Group: Unknown

OTHER DOCUMENTS

Examiner's Initial		
	DA	Rosen, Joseph M. et al., "Fascicular Sutureless and Suture Repair of the Peripheral Nerves", <i>Orthopaedic Review</i> , Vol. VIII, No. 4, 1979, pp. 85-92.
	DB	Reid, R. L. et al.; "Biodegradable Cuff an Adjunct to Peripheral Nerve Repair: A Study in Dogs"; <i>The Hand</i> ; vol. 10, no. 3, pp. 259-266; 1978
	DC	Henderson, C. E. et al.; "Denervation Increases a Neurite-promoting Activity in Extracts of Skeletal Muscle"; <i>Nature</i> ; vol. 302, pp. 609-611; 1983
	DD	Mackinnon, S. E.; "Nerve Regeneration Through a Pseudosynovial Sheath in a Primate Model"; <i>Plastic and Reconstructive Surgery</i> ; vol. 75, no. 6, pp. 833-839; 1985
	DE	Nishimune, H. et al.; "Neurocrescin: A Novel Neurite-outgrowth Factor Secreted by Muscle After Denervation"; <i>NeuroReport</i> ; vol. 8, pp. 3649-3654; 1997
	DF	Ochi, M. et al.; "Promotion of Sciatic Nerve Regeneration in Rats by a New Neurotrophic Pyrimidine Derivative MS-430"; <i>Gen. Pharmac.</i> ; vol. 26, no. 1, pp. 59-64; 1995
	DG	Mackinnon, S. E. et al.; "Clinical Nerve Reconstruction with a Bioabsorbable Polyglycolic Acid Tube"; <i>Plastic and Reconstructive Surgery</i> ; vol. 85, no. 3, pp. 419-424; 1990
	DH	Aebischer, P. et al.; "Regeneration of Transected Sciatic Nerves Through Semi-Permeable Nerve Guidance Channels"; <i>Trans Am Soc Artif Intern Organs</i> ; vol. XXXII, pp. 474-477; 1986
	DI	McDonald, J. W.; "Transplanted Embryonic Stem Cells Survive, Differentiate and Promote Recovery in Injured Rat Spinal Cord"; <i>Nature Medicine</i> ; vol. 5, no. 12, pp. 1410-1412; 1999
	DJ	Uyeda, A. et al.; "MDP77: A Novel Neurite-Outgrowth-Promoting Protein Predominantly Expressed in Chick Muscles"; <i>Biochemical and Biophysical Research Communications</i> ; vol. 269, pp. 564-569; 2000
	DK	Pu, L. et al.; "Effects of Nerve Growth Factor on Nerve Regeneration Through a Vein Graft Across a Gap"; <i>Plastic and Reconstructive Surgery</i> ; vol. 104, no. 5, pp. 1379-1385; 1999
	DL	Rosen, J. M. et al.; "Fascicular Tubulization: A Cellular Approach to Peripheral Nerve Repair"; <i>Annals of Plastic Surgery</i> ; vol. 11, no. 5, pp. 397-411; 1983
	DM	Terada, N. et al. "Bioartificial Nerve Grafts Based on Absorbable Guiding Filament Structures - Early Observations"; <i>Scand J Plast Reconstr Hand Surg</i> ; vol. 31, pp. 1-6; 1997

INFORMATION DISCLOSURE STATEMENT		Atty. Docket No. NPR-171	Serial No. 10/540,621 (unofficial)
PTO-1449 Page 3 of 4		Applicant: Nobutoshi DOI et al.	
Filing Date: August 18, 2005		Group: Unknown	

OTHER DOCUMENTS

Examiner's Initial		
	DN	Henderson, C. E. et al.; "Neurite Outgrowth from Embryonic Chicken Spinal Neurons is Promoted by Media Conditioned by Muscle Cells"; <i>Proc. Natl. Acad. Sci.</i> ; vol. 78, no. 4, pp. 2625-2629; 1981
	DO	Gibson, K. L. et al.; "Comparison of Sciatic Nerve Regeneration Through Silicone Tubes and Nerve Allografts"; <i>Microsurgery</i> ; vol. 10, pp. 126-129; 1989
	DP	Molander, H. et al.; "Nerve Repair Using a Polyglactin Tube and Nerve Graft: An Experimental Study in the Rabbit"; <i>Biomaterials</i> ; vol. 4, pp. 276-280; 1983
	DQ	Aebischer, P. et al.; "Blind-ended Semipermeable Guidance Channels Support Peripheral Nerve Regeneration in the Absence of a Distal Nerve Stump"; <i>Brain Research</i> ; vol 454, pp. 179-187; 1988
	DR	Lundborg, G. et al.; "Regeneration of Peripheral Nerve Through a Preformed Tissue Space. Preliminary Observations on the Reorganization of Regenerating Nerve Fibres and Perineurium"; <i>Brain Research</i> ; vol. 178, pp. 573-576; 1979
	DS	Lundborg, G. et al.; "Bioartificial Nerve Grafts"; <i>Scand J Plast Reconstr Hand Surg</i> ; vol. 30, pp. 105-110; 1996
	DT	Nyilas, E. et al.; "Synthetic Bioresorbable Polymers: I. Polyester and Polyester Composite Guidance Channels for Peripheral Nerve Repair"; <i>9th Annual Meeting of the Society for Biomaterials</i> ; 1983
	DU	Lee, G. et al.; "Experimental Study of a Nerve Guide-Tube Made from Dehydrothermally Treated Gelatin Application to Repair of Gap in Rat Sciatic Nerve"; <i>J. Artif. Organs. (Jinkoh Sohki)</i> ; vol. 22, no. 2, pp. 364-369; 1993
	DV	Sunderland, S.; "A Classification of Peripheral Nerve Injuries Producing Loss of Function"; <i>Brain</i> ; vol. 74, no. 4, pp. 491-516; 1951
	DW	Wakabayashi, Y. et al.; "Regeneration of Motor Nerve"; <i>Inflammation and Immunity</i> ; vol. 9, no. 3, pp. 271-277; 2001
	DX	Itoh, S. et al.; "Regeneration of Motion Nerve and Artificial Nerve"; <i>Modern Treatment</i> ; vol. 31, no. 12, pp. 115-123; 1999
	DY	Wakabayashi, Y. et al.; "Artificial Nerve for Regeneration of Motion Nerve"; <i>Clinical Neuroscience</i> ; vol. 18, no. 11, pp. 1280-1283; 2000
	DZ	Archibald, S. J. et al.; "A Collagen-Based Nerve Guide Conduit for Peripheral Nerve Repair: An Electrophysiological Study of Nerve Regeneration in Rodents and Nonhuman Primates"; <i>The Journal of Comparative Neurology</i> ; vol. 306, pp. 685-696; 1991

INFORMATION DISCLOSURE STATEMENT		Atty. Docket No. NPR-171	Serial No. 10/540,621 (unofficial)
PTO-1449 Page 4 of 4		Applicant: Nobutoshi DOI et al.	
		Filing Date: August 18, 2005	Group: Unknown

OTHER DOCUMENTS

Examiner's Initial		
	DAA	Itoh, S. et al.; "Synthetic Collagen Fibers Coated with a Synthetic Peptide Containing the YIGSR Sequence of Laminin to Promote Peripheral Nerve Regeneration <i>in vivo</i> "; <i>Journal of Materials Science: Materials in Medicine</i> ; vol. 10, pp. 129-134; 1999
	DBB	Tong, X. et al.; "Sciatic Nerve Regeneration Navigated by Laminin-Fibronectin Double Coated Biodegradable Collagen Grafts in Rats"; <i>Brain Research</i> , vol. 663, pp. 155-162; 1994
	DCC	Colin, W. et al.; "Nerve Regeneration Through Collagen Tubes"; <i>J. Dent. Res.</i> , vol. 63(7), pp. 987-993; 1984
	DDD	Itoh, S. et al.; "A Study on Induction of Nerve Regeneration Using Bioabsorbable Tubes"; <i>J. Jpn. Soc. Surg. Hand.</i> ; vol. 17(4), pp. 371-375; 2000
	DEE	Suzuki, K. et al.; "Development of PGA-Collagen Channel for Peripheral Nerve Regeneration-Functional Evaluation"; <i>Jpn. J. Artif. Organs</i> ; vol. 27(2), pp. 490-494; 1998
	DFF	Kiyotani, T. et al.; "Peripheral Nerve Regeneration in a PGA-Collagen Composite Tube"; <i>Jpn. J. Artif. Organs</i> ; vol. 25(2), pp. 476-480; 1996
	DGG	Shimada, H. et al.; "Induction of Peripheral Nerve Regeneration Using Laminin-Fibronectin Double Coated Collagen Fiber Grafts"; <i>Jpn. J. Artif. Organs</i> ; vol. 22(2), pp. 359-363; 1993
	DHH	Kline, D. G. et al.; "The Use of a Resorbable Wrapper for Peripheral-Nerve Repair"; <i>Journal of Neurosurgery</i> ; vol. 21(9), pp. 737-750; 1964

Examiner:	Date Considered:
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